

REMARKS

Claims 1-6, 8-12, and 14-22 are pending. Reconsideration of the application is respectfully requested based on the following remarks.

I. REJECTION OF CLAIMS 1-6, 8-12, and 14-22 UNDER 35 U.S.C. § 102(e)

Claims 1-6, 8-12, and 14-22 were rejected under 35 U.S.C. § 102(e), as being anticipated by U.S. Patent No. US 6,963,946 B1 Dwork et al. (Dwork). Withdrawal of the rejection is respectfully requested for at least the following reasons.

Independent claim 1 recites a network interface system comprising *a descriptor management system coupled with the bus interface system and the security system, the descriptor management system being **adapted to obtain initialization vector information from the host system and to provide the initialization vector information to the security system.***

Although the network interface system of Dwork also comprises a descriptor management unit comprising descriptors, which include pointers to one or more data buffers, the descriptor management unit of Dwork is not **adapted to obtain initialization vector information** (e.g., initialization vector information 191 of Fig. 1A from initialization vector 226 of Fig. 1F) **from the host system**. In addition, the descriptor management unit of Dwork is not **adapted to provide the initialization vector information to the security system**. In particular, the pointers in the descriptors of Dwork are not “inherently” initialization vectors (e.g., IV 226), nor do these pointers inherently result in initialization vector information (e.g., 191) being conveyed to the security system.

In one non-limiting example, the inventors have appreciated that in network interface systems, such as the systems 2 and 102 described in the present invention, in which security processing is performed outside the host system 6, that the security processing system 124 must be able to differentiate between outgoing data frames 200 that include an IV 226 (e.g., as illustrated in Fig. 1F) and those that do not (Fig. 1E). In the example systems of the present invention, initialization vector information 191 is

provided to the security processing system 124 by the descriptor management system 130, to indicate whether an IV 226 is present in the frame 200, and if so, the length of the IV 226. Although such information may be derived from the security association (SA) associated with a particular data frame 200, the provision of the information 191 by the descriptor system 130 advantageously allows the encryption to begin before the SA information has been retrieved by the security processor 174, thus facilitating high-speed data encryption to meet gigabit wire speeds.

By contrast, the DMU 130 of the network interface system 102 described by Dwork fails to teach a means or method of providing initialization vector information to the security system, but instead Dwork describes utilizing Security Associations (SAs) from an SA memory 140 which are obtained prior to security processing (reference Dwork, column 14, lines 45-54). Therefore Dwork et al. fail to anticipate the invention of claim 1 and the claims which depend therefrom. Accordingly, withdrawal of the rejection is respectfully requested.

Similarly, independent claim 15 is directed to *a method of encrypting outgoing data in a network interface system, comprising **providing initialization vector information from a descriptor** to a security system in a network interface system, and **selectively employing an initialization vector (IV)** from the outgoing data to perform CBC encryption or authentication of the outgoing data **according to the initialization vector information**.*

By contrast, Dwork does not discuss **providing initialization vector information from a descriptor to a security system**. Further, Dwork does not discuss **selectively employing an initialization vector (IV)** from the outgoing data to perform CBC encryption or authentication of the outgoing data **according to the initialization vector information**.

Therefore the cited art does not anticipate the claimed invention of independent claims 1 and 15, and the claims which depend therefrom. Accordingly, withdrawal of the rejection is respectfully requested.

II. CONCLUSION

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, AMDP763US.

Respectfully submitted,
ESCHWEILER & ASSOCIATES, LLC

By /Thomas G. Eschweiler/
Thomas G. Eschweiler
Reg. No. 36,981

National City Bank Building
629 Euclid Avenue, Suite 1000
Cleveland, Ohio 44114
(216) 502-0600